

SELF-POWERED OVER-VOLTAGE PROTECTION CIRCUIT

ABSTRACT

A self-powered overvoltage protection circuit for a regulated DC-DC converter looks for the onset of a very large input voltage prior to regulation. In response to such a voltage during this interval, it turns on a low side electronic power switching device, in accordance with the voltage at one of the phase node and the regulated voltage output terminal from which the protection circuit derives its power. This provides a bypass path for an overvoltage that would otherwise be coupled from the regulated voltage output terminal to one or more load devices.